Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor - Anthony G. Brown, Lt. Governor - Joshua M. Sharfstein, M.D., Secretary

December 5, 2014

Public Health Preparedness and Situational Awareness Report: # 2014:48 Reporting for the week ending 11/29/14 (MMWR Week #48)

CURRENT HOMELAND SECURITY THREAT LEVELS

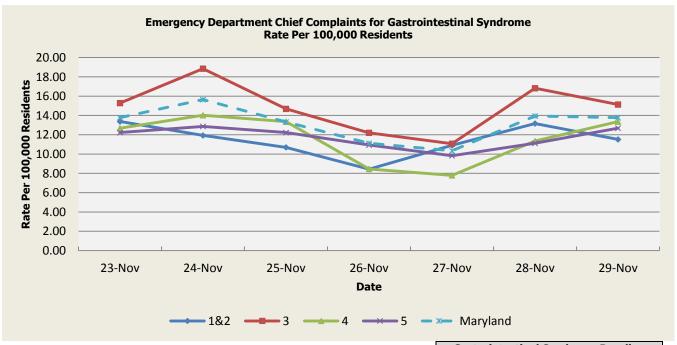
National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

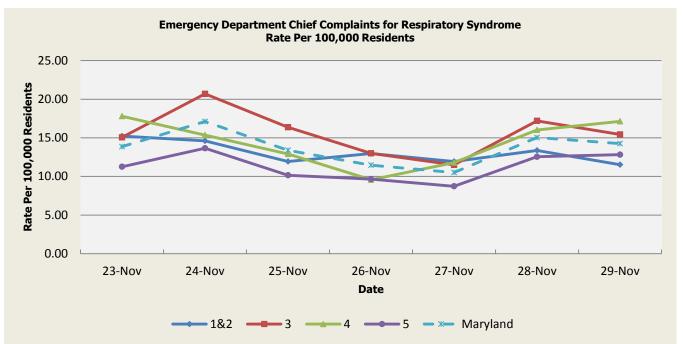
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There was 1 gastrointestinal illness outbreak reported this week: 1 outbreak of gastroenteritis associated with a nursing home (Region 3).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	Maryland				
Mean Rate*	13.17	14.22	15.34	10.36	12.76	
Median Rate*	13.17	14.12	14.69	10.30	12.70	

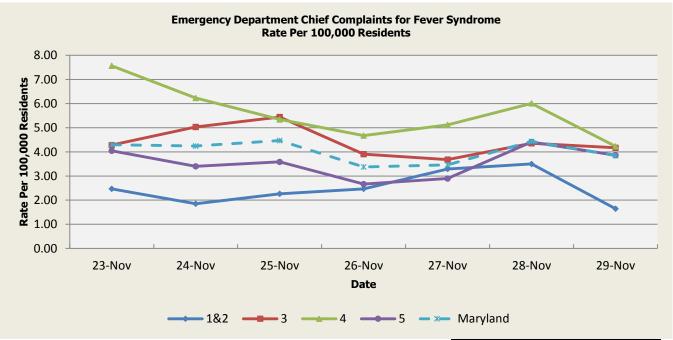
* Per 100,000 Residents



There was 1 respiratory illness outbreak reported this week: 1 outbreak of pneumonia associated with a nursing home (Region 5).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	5	Maryland			
Mean Rate*	12.07	13.22	13.68	9.75	11.85		
Median Rate*	11.73	12.96	13.13	9.51	11.64		

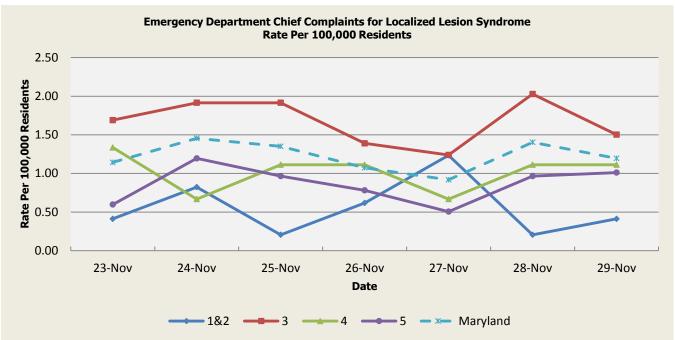
* Per 100,000 Residents



There were no fever outbreaks reported this week.

_		Fever Syndrome Baseline Data January 1, 2010 - Present						
	Health Region	1&2	3	4	5	Maryland		
	Mean Rate*	3.22	3.59	3.85	3.12	3.40		
Į	Median Rate*	3.09	3.49	3.78	3.03	3.29		

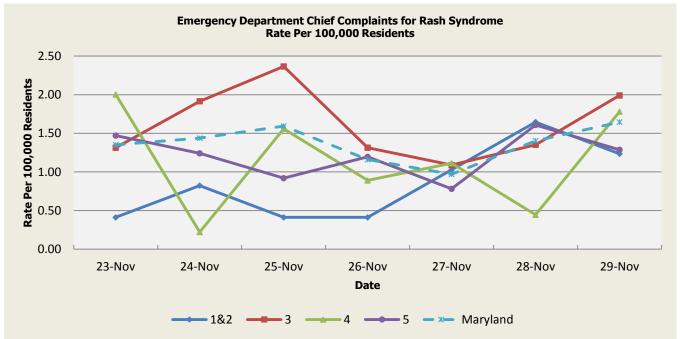
Per 100,000 Residents



There were no localized lesion outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.17	1.98	2.07	1.05	1.57	
Median Rate*	1.03	1.92	2.00	1.01	1.52	

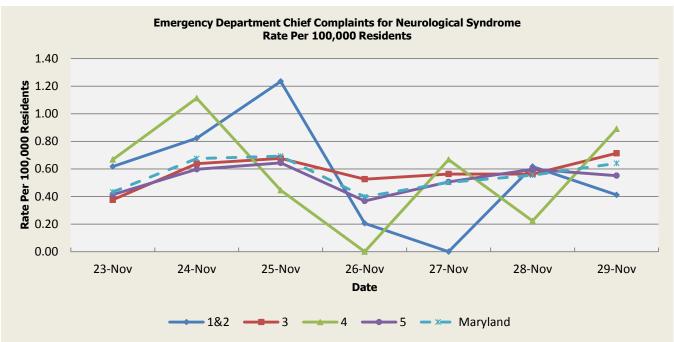
^{*} Per 100,000 Residents



There was 1 rash outbreak reported this week: 1 outbreak of scabies in an institution (Region 4).

	Rash Syndrome Baseline Data January 1, 2010 - Present							
Health Region	182 3 4 5 Maryland							
Mean Rate*	1.41	1.75	1.79	1.09	1.48			
Median Rate*	1.23	1.69	1.78	1.06	1.42			

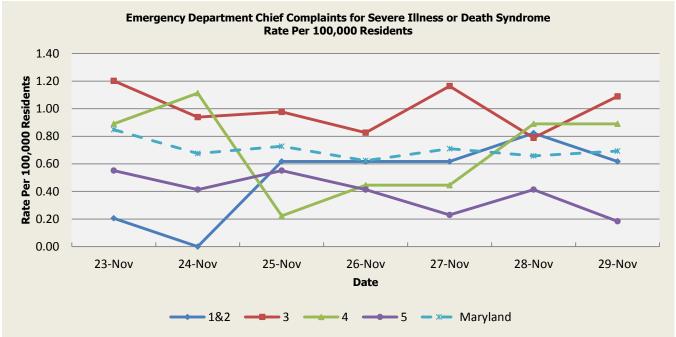
* Per 100,000 Residents



There were no neurological outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	Maryland					
Mean Rate*	0.61	0.62	0.59	0.42	0.54		
Median Rate*	0.62	0.60	0.45	0.41	0.54		

^{*} Per 100,000 Residents

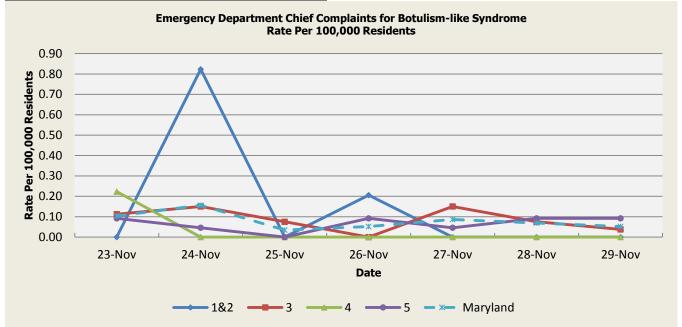


There were no severe illness or death outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.80	0.95	0.89	0.42	0.73		
Median Rate*	0.82	0.94	0.89	0.41	0.73		

* Per 100,000 Residents

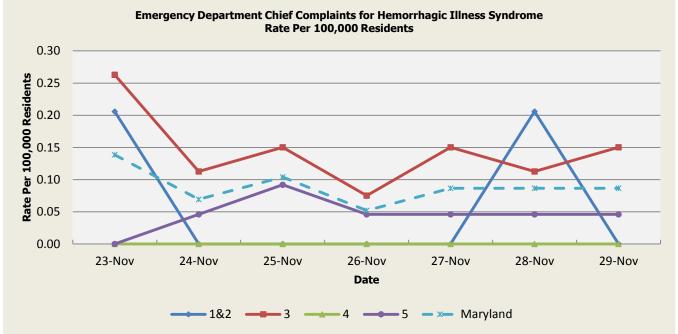
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 11/23 (Region 4) and 11/24 (Regions 1&2). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2 3 4 5 Maryland						
Mean Rate*	0.06	0.04	0.04	0.03	0.04		
Median Rate*	0.00	0.04	0.00	0.00	0.03		

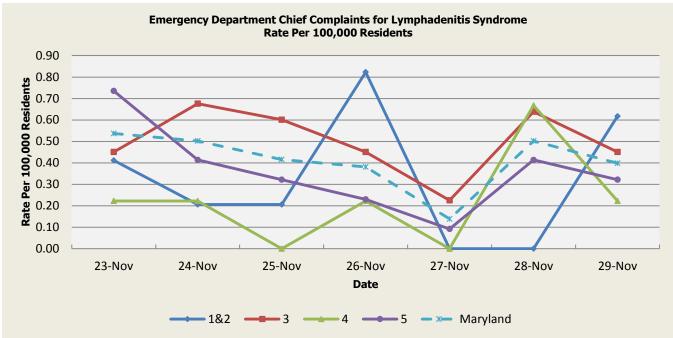
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 11/23 (Regions 1&2, 3) and 11/28 (Regions 1&2). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.04	0.03	0.03	0.03
Median Rate*	0.00	0.04	0.00	0.00	0.03

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 11/23 (Region 5), 11/24 (Region 3), 11/26 (Regions 1&2), and 11/28 (Regions 3 and 4). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.33	0.34	0.35	0.24	0.30			
Median Rate*	0.21	0.30	0.22	0.23	0.29			

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

		Counts of Reported Cases‡									
Condition		November		Cumulat	ive (Year to	Date)**					
Vaccine-Preventable Diseases	2014	Mean*	Median*	2014	Mean*	Median*					
Aseptic meningitis	36	33.6	34	374	438.6	452					
Meningococcal disease	0	0.8	0	6	7.8	9					
Measles	0	0	0	0	1.6	1					
Mumps	0	0.2	0	1	22	7					
Rubella	0	0	0	1	1	0					
Pertussis	4	21.2	18	144	180.4	127					
Foodborne Diseases	2014	Mean*	Median*	2014	Mean*	Median*					
Salmonellosis	35	61.6	55	718	873.4	891					
Shigellosis	10	10.8	11	189	176	127					
Campylobacteriosis	22	40.6	37	544	541.6	559					
Shiga toxin-producing Escherichia coli (STEC)	6	4	5	71	64.2	63					
Listeriosis	2	1.2	1	11	15.2	16					
Arboviral Diseases	2014	Mean*	Median*	2014	Mean*	Median*					
West Nile Fever	0	0	0	2	6.8	6					
Lyme Disease	3	61.2	67	661	1317.6	1291					
Emerging Infectious Diseases	2014	Mean*	Median*	2014	Mean*	Median*					
Chikungunya	0	0	0	43	0.2	0					
Dengue Fever	1	0.8	1	9	7.8	9					
Other	2014	Mean*	Median*	2014	Mean*	Median*					
Legionellosis	5	8.4	10	119	130.8	134					

[‡] Counts are subject to change *Timeframe of 2009-2013

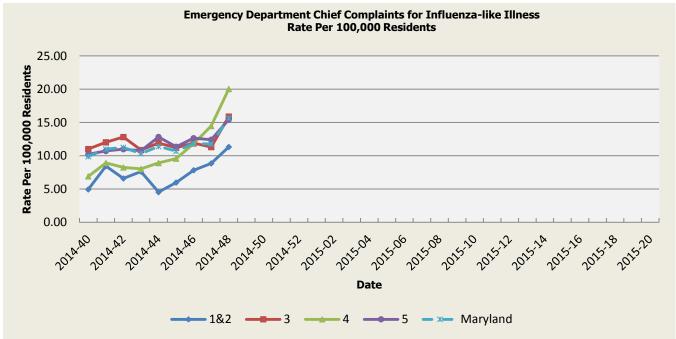
⁰¹³

^{**}Includes January through November

SYNDROMIC INFLUENZA SURVEILLANCE

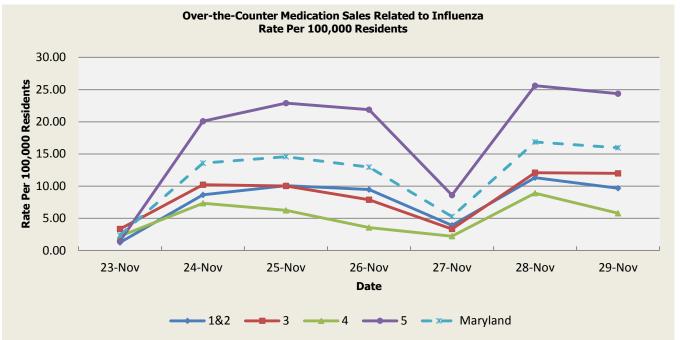
Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 22 (October through May).

Seasonal influenza activity for Week 48 was: Widespread Activity with Minimal Intensity.



	Influenza-like Illness Baseline Data Week 1 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	9.36	9.71	10.35	9.26	9.56		
Median Rate*	7.82	8.07	8.46	7.33	7.88		

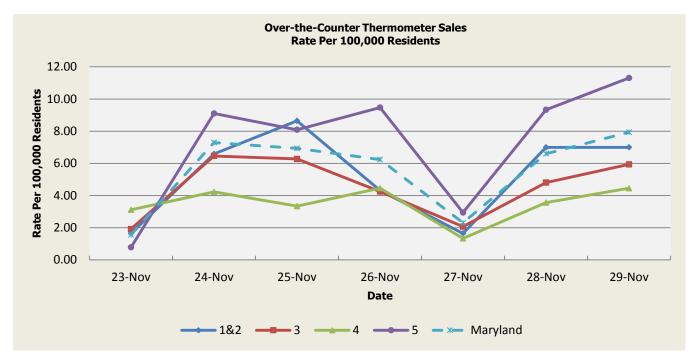
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of OTC flu medication sales on 11/28 (Regions 4, 5) and 11/29 (Region 5).

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.16	5.87	2.85	13.97	8.63
Median Rate*	4.12	4.88	2.45	11.65	7.10

* Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC thermometer sales this week.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.76	4.87	3.42	8.35	6.14
Median Rate*	5.14	4.51	3.12	7.72	5.72

^{*} Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a deescalation of activities towards those in the interpandemic phase may occur. As of October 2, 2014, the WHO-confirmed global total (2003-2014) of human cases of H5N1 avian influenza virus infection stands at 688, of which 393 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 57%.

NATIONAL DISEASE REPORTS

No national disease reports for MMWR Week 48.

INTERNATIONAL DISEASE REPORTS

EBOLA (MULTI-COUNTRY): 26 Nov 2014 WHO Ebola Response Roadmap Situation Report. Read more: http://www.promedmail.org/direct.php?id=20141126.2993049 (click through to who.int link)

LASSA FEVER (BENIN): 26 Nov 2014 The country's Health Minister said that 9 people have died in Benin from Lassa fever, a viral disease common in West Africa with symptoms similar to Ebola. Read more: http://www.promedmail.org/direct.php?id=20141126.2992727

E COLI (UNITED KINGDOM) 28 Nov 2014 Another E. coli case has been confirmed in Dorset [England], taking the total number of victims to 11. Read more: http://www.promedmail.org/direct.php?id=20141129.2999769

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website: http://phpa.dhmh.maryland.gov/influenza/fluwatch/SitePages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.dhmh.md.gov/

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Dagiona 1 % 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 2	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

